

**ENGLISH VERSION**

- 1 A person bought a car and sold it for ₹ 5,70,000. If he incurred a loss of 5%, how much did he spend to buying it?  
 (A) ₹ 7,50,000 (B) ₹ 6,00,000  
 (C) ₹ 5,00,000 (D) ₹ 4,50,000  
 (E) Question not attempted
- 2 Given two identical sequences: [4000, 400.0, 120.0, 60.0, 42.0, 37.8] and [1000, A, B, C, D, E]. What is the entry at the place of C for the second sequence?  
 (A) 9.45 (B) 10.5  
 (C) 15.0 (D) 30.0  
 (E) Question not attempted
- 3 A single digit number  $n > 2$  is divisible by 2 but not divisible by 4. Which one of the following is divisible by 6?  
 (A)  $9n + 4$  (B)  $6n + 7$   
 (C)  $9n$  (D)  $5n + 3$   
 (E) Question not attempted
- 4 A frog tries to come out of a 30 m deep dried well with slippery walls. In every jump the frog jumps up by 70 cm, but slides down 30 cm. What is the minimum number of jumps required for the frog to come out of the well?  
 (A) 78 (B) 76  
 (C) 75 (D) 73  
 (E) Question not attempted
- 5 What is the value of X in the sequence 4, 8, 32, 192, 1536, 15360, X ?  
 (A) 184313 (B) 184320  
 (C) 184321 (D) 184327  
 (E) Question not attempted
- 6 A woman takes  $1/11$  time in rowing a certain distance downstream than upstream. What is the ratio of the speed of the current to the speed of the boat in still water?  
 (A)  $6/5$  (B)  $11/5$   
 (C)  $11/6$  (D)  $5/6$   
 (E) Question not attempted
- 7 Which one of the following fractions will have minimum change in its value if 2 is added to both numerator and the denominator?  
 (A)  $1/5$  (B)  $5/8$   
 (C)  $1/2$  (D)  $3/4$   
 (E) Question not attempted
- 8 A pie chart gives the expenditure on 5 different items A, B, C, D, E in a household. If B, C, D, E correspond to  $65^\circ$ ,  $45^\circ$ ,  $90^\circ$ ,  $100^\circ$  respectively, then what is the percentage of expenditure on item A?  
 (A)  $175/6$  (B)  $50/3$   
 (C) 25 (D)  $25/18$   
 (E) Question not attempted

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9 Consider the following information: A person starts from point 'O'

Row	Movement Pattern	How far from O	Final Direction from start
1	4 m East → 3 m South	7 m	East
2.	8 m North → 15 m West	17 m	North-West
3.	6 m South → 8 m East	10 m	West

In how many of the above rows is/are the given information correctly matched?

- (A) Only one      (B) Only two       $\frac{4}{3}$   
 (C) All three      (D) None  
 (E) Question not attempted

10 Consider the following information:

Row	Column A (Series)	Column B (Rule)	Column C (Next term)
1. ✓	2, 6, 18, 54, .....	multiply by 3	162
2. ✓	144, 121, 100, 81, .....	perfect squares descending	64
3.	B, D, G, K, .....	gaps of +2, +3, +4, +5, ....	P

In how many of the above rows is/are the given information correctly matched?

- (A) Only one      (B) Only two  
 (C) All three      (D) None  
 (E) Question not attempted

11 Given below are two statements:

**Statement I :**

If the side of a square is doubled, its area also doubles.

**Statement II :**

The perimeter of a square increases linearly with the length of its side.

In the light of the above statements, choose the Correct answer from the options given below:

- (A) Both Statement I and Statement II are true.  
 (B) Both Statement I and Statement II are false.  
 (C) Statement I is true but Statement II is false.  
 (D) Statement I is false but Statement II is true.  
 (E) Question not attempted

12 Given below are two statements:

**Statement I :**

If a number is divisible by 4, it must be divisible by 2.  $\frac{92}{4}$

**Statement II :**

If a number is divisible by 2, it must be divisible by 4.

In the light of the above statements, choose the Correct answer from the options given below:

- (A) Both Statement I and Statement II are true.  
 (B) Both Statement I and Statement II are false.  
 (C) Statement I is true but Statement II is false.  
 (D) Statement I is false but Statement II is true.  
 (E) Question not attempted

13 Which of the following statements is/are correct?

1. If the sum of the digits of a two digit number is 10 and product of digits is 24, then the number can be 63.
2. If the difference of digits of a two digit number is 4 and the product of two digits is 45, then number can be 95.

Select the answer using the codes given below:

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2
- (E) Question not attempted

14 Which of the following statements is/are correct?

1. If 5 workers complete a task in 12 days, then 10 workers can complete the same task in 5 days.
2. If 8 workers complete a task in 14 days, then 4 workers can complete the same task in 30 days.

Select the answer using the codes given below:

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2
- (E) Question not attempted

15 Given below are two statements:

**Statement I :**

An accurate clock shows the time as 3:00 pm. After the hour hand has moved  $135^\circ$ , the time would be 7:30 pm.

**Statement II :**

The angle between the minute hand and hour hand when the clock shows 4:25 pm. is  $17.5^\circ$ .

In the light of the above statements, choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true.
- (B) Both Statement I and Statement II are false.
- (C) Statement I is true but Statement II is false.
- (D) Statement I is false but Statement II is true.
- (E) Question not attempted

16 Given below are two statements:

**Statement I :**

A 200 m long train is running at the speed of 30 km/hr. The time taken by the train to pass a man standing near the railway line is 12 seconds.

**Statement II :**

Two trains of equal length take 20 seconds and 30 seconds, respectively to cross a telegraph post. If the length of each train is 180 metres, then the two trains will cross each other travelling in opposite direction in 20 seconds.

In the light of the above statements, choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true.
- (B) Both Statement I and Statement II are false.
- (C) Statement I is true but Statement II is false.
- (D) Statement I is false but Statement II is true.
- (E) Question not attempted

Q. No. 17-18

Interdisciplinary research between the History of India and Carnatic Music offers a profound avenue for understanding the cultural, social, and political narratives that have shaped contemporary India. By exploring the evolution of Carnatic Music within its historical context, scholars can uncover how musical traditions reflect societal changes, religious influences, and the ebb and flow of imperial dynasties. This synergy not only enriches our appreciation for the art form but also provides insights into the nation's diverse identities. It allows us to trace the migration of musical styles, the impact of colonialism, and the role of music in social cohesion and resistance movements. Such interdisciplinary work can foster a deeper sense of national unity by highlighting the shared heritage and cultural continuity that binds India's diverse populace, while also acknowledging regional variations and their historical significance. This approach can contribute to education, tourism, and policy-making, promoting cultural preservation, cross-cultural dialogue, and informed decision-making that respects and celebrates India's rich tapestry of history and music.

17 Consider the following statements made on the basis of the above passage.

1. Cultural, social and political narratives instrumental in shaping contemporary India can be better understood through interdisciplinary research between the History of India and Carnatic music.
2. Musical traditions cannot reflect anything about societal changes, religious influences, and the ebb and flow of imperial dynasties.

3. Interdisciplinary research between the History of India and Carnatic Music helps highlight the shared heritage and cultural continuity, ignoring variations across regions.
4. Understanding broader historical contexts is vital to trace the evolution of music styles.

Which of the above statement/s is/are valid/correct?

- (A) 1 and 4
- (B) All the above
- (C) 2 and 4
- (D) 1 only
- (E) Question not attempted

18 Which of the following inferences made on the basis of the above passage is correct?

- (A) Interdisciplinary research can open multiple avenues for broadening the boundaries of diverse disciplines.
- (B) Such research cannot contribute to our understanding of colonialism and resistance movements.
- (C) Ancient art forms are no longer relevant to our appreciation of contemporary art.
- (D) Interdisciplinary research is limited to academics, without any practical application.
- (E) Question not attempted.

Q. No. 19-20

The field of Diversity and Inclusion (D & I) strives to create equitable workplaces that value diverse perspectives, experiences, and backgrounds. However, it faces significant ethical issues, such as tokenism - where individuals from under-represented groups are included merely to enhance the appearance of inclusivity without genuine commitment to their integration and advancement. Another issue is the potential for well-meaning D & I initiatives to inadvertently impose a 'one size fits all' approach that may not adequately address the unique needs and cultures of different groups. Moreover, there's the risk of privacy violations when collecting and handling demographic data without proper consent or safeguards. Ethical dilemmas also arise when balancing the need for affirmative action with the principle of meritocracy, and in assessing the true impact of D & I programmes, which must go beyond mere representation to ensure that all individuals have equal opportunities for growth and leadership within organizations.

19 Following are a few assumptions based on the above passage:

1. The only way to ensure true diversity is by imposing strict quotas on under-represented groups while implementing D & I programmes.
2. D & I programmes should focus on representation without considering the needs of diverse individuals.

3. D & I initiatives are inherently unethical because they prioritize inclusivity over performance.
4. Balancing the need for positive action with a merit-based system can contribute towards implementation of D & I in true spirit.

Which of the above assumption/s is/are valid?

- (A) None of the above
- (B) 2 only ✓
- (C) All the above
- (D) 4 only ✓
- (E) Question not attempted ✓

20 Which of the following is not a major ethical issue in the field of Diversity and Inclusion?

- (A) Tokenism ✓
- (B) Insufficient funding
- (C) A 'one size fits all' approach ✓
- (D) Privacy violation ✓
- (E) Question not attempted ✓

ENGLISH VERSION

21 A group of three interrelated words is given. Choose a word from the given alternatives, that belongs to same group.

Pituitary: Thyroid: Pancreas

- (A) Adrenal (B) Heart  
(C) Liver (D) Kidney  
(E) Question not attempted

22 Choose the word which is different from the other words in the group.

- (A) Copper (B) Tin  
(C) Brass (D) Platinum  
(E) Question not attempted

23 Choose the word which is different from the other words in the group.

- (A) Carrot (B) Potato  
(C) Tomato (D) Ginger  
(E) Question not attempted

24 In each of the following letter series, some of the letters are missing which are given in that order as one of the alternatives below it. Choose the correct alternative.

abb a baac a bab a aba

- (A) abba (B) abab  
(C) ccac (D) aabb  
(E) Question not attempted

25 If wall is called window, window is called door, door is called floor, floor is called roof and roof is called ventilator, what will a person stand on?

- (A) Wall (B) Floor  
(C) Roof (D) Ventilator  
(E) Question not attempted

26 I am facing east, I turn  $100^\circ$  in the clockwise direction and then  $145^\circ$  in the anticlockwise direction. Which direction am I facing now?

- (A) East (B) North-east  
(C) North (D) South-west  
(E) Question not attempted

27 Pointing out to a lady, Rajan said, "She is the daughter of the woman who is the mother of the husband of my mother." Who is the lady to Rajan?

- (A) Aunt (B) Granddaughter  
(C) Daughter (D) Sister  
(E) Question not attempted

Q. No. 28-31

Refer to the data and answer the following question.

Five friends, named Ajay, Bhushan, Chandru, Dinesh and Eknath, each belonging to a different profession, play Cricket, Tennis, Hockey, Polo and Squash, not necessarily in the same order. We know that:

1. Ajay plays Tennis and he is not a Professor
2. Dinesh is not a Doctor
3. The Writer plays Squash and the Doctor plays Cricket
4. Bhushan does not play Squash
5. Eknath is the Manager and does not play Polo
6. The 5<sup>th</sup> person is an Architect

28 If Dinesh Plays Polo, who plays Cricket?

- (A) Bhushan (B) Chandru  
(C) Ajay (D) Eknath  
(E) Question not attempted

- 29 What is the profession of the person who plays polo?  
 (A) Architect  
 (B) Professor  
 (C) Doctor  
 (D) Cannot be determined  
 (E) Question not attempted
- 30 Who of the following is the Architect?  
 (A) Ajay  
 (B) Bhushan  
 (C) Chandru  
 (D) Eknath  
 (E) Question not attempted
- 31 Which game is played by the Manager?  
 (A) Squash  
 (B) Tennis  
 (C) Hockey  
 (D) Cannot be determined  
 (E) Question not attempted
- 32 In a certain code 'SIKKIM' is written as 'THLJL'. How is 'TRAINING' written in that code?  
 (A) SQBHOHOH  
 (B) UQBHOHOF  
 (C) UQBJOHHO  
 (D) UQBJOHOH  
 (E) Question not attempted
- 33 If 'MACHINE' is coded as 19-7-9-14-15-20-11, then how will you code 'DANGER'?  
 (A) 10-7-20-13-11-24  
 (B) 10-7-20-16-11-24  
 (C) 13-7-20-9-11-25  
 (D) 13-7-20-10-11-25  
 (E) Question not attempted
- 34 The question given below contains four arguments of three sentences each. Choose the set in which the third statement is a logical conclusion of the first two.
1. All Ts are square; All squares are rectangular; All Ts are rectangular.
  2. Some fat are elongated; Some elongated things are huge; Some fat are huge.
  3. Idiots are bumlbers; Bumlbers fumble; Idiots fumble.
  4. Water is good for health; Health foods are rare; Water is rare.
- (A) 4 only  
 (B) 3 only  
 (C) Both 1 & 3  
 (D) 1, 2, 3 & 4  
 (E) Question not attempted

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35 When a certain number is multiplied by 56, the product entirely comprises of digit 8's only (888...). Which of the following is the smallest such number?

- (A) 15093 (B) 15738  
(C) 15873 (D) 16283  
(E) Question not attempted

36 A man starts from his house, walks for 5 meters towards East, then turns to the North and walks 10 meters again; then he turns towards East and again walks 5 meters. If his house faces to the North, in which direction he is from the starting point?

- (A) North-West (B) North-East  
(C) South-East (D) North  
(E) Question not attempted

37 If you have two straight sticks of length 3.44 feet and 2.20 feet, what is the minimum length (in feet) that you can measure?

- (A) 0.1 (B) 0.04  
(C) 0.2 (D) 0.4  
(E) Question not attempted

38 A donor goes to bank from his house by bicycle. He first travels 5 km towards South, then 20 km towards East, then 5 km towards South. then 15 km towards East, then 20 km towards West, then 35 km towards North, and finally 15 km towards West. What is the shortest distance between his bank and his house?

- (A) 15 (B) 25  
(C) 35 (D) 40  
(E) Question not attempted

39 Two candidates, X and Y, contested an election. 100% of the voters cast their vote and there were no invalid votes. NOTA (None of The Above) option was not there. X got 20% of the votes cast and lost by 1623 votes. What is the total number of voters in the voters list?

- (A) 2705  
(B) 6905  
(C) 12605  
(D) 12705  
(E) Question not attempted

40 4 friends visit a church on every 13<sup>th</sup>, 15<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> day of the month. If all of them met at the church on a Monday, then on which day will they meet next?

- (A) Sunday (B) Tuesday  
(C) Saturday (D) Thursday  
(E) Question not attempted

41 Consider the following sequence of numbers:

6 9 2 2 2 6 8 9 1 3 7 5 2 6 7 6 7 7 5 2 9 1 6 4 6 3 9 8.

How many odd numbers are followed by another odd number in the sequence?

- (A) 5 (B) 6  
(C) 8 (D) 11  
(E) Question not attempted

(40)

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42 What is the remainder when  $13 \times 57 \times 67 \times 78 \times 52$  is divided by 10?  
(A) 3 (B) 8  
(C) 6 (D) 2  
(E) Question not attempted

43 What is the remainder if  $8^{145}$  is divided by 5?  
(A) 4 (B) 0  
(C) 3 (D) 6  
(E) Question not attempted

44 A girl drops a ball from a height of 4.0 m. Every time the ball hits the ground, it bounces back to attain a height  $7/10^{\text{th}}$  of the previous height. The ball does not bounce further if the previous height is less than 20 cm. How many times the ball hits the ground before it stops bouncing?  
(A) 8 (B) 9  
(C) 10 (D) 11  
(E) Question not attempted

45 A scored 15 marks less than B in an examination. If B scored 25% more marks than A, then how much marks did B score?  
(A) 35 (B) 40  
(C) 60 (D) 75  
(E) Question not attempted

46 31 children are standing in a circle and one of them (say child-1) has a ring. The ring is passed clockwise. Child-1 passes it on to child-2, child-2 passes it on to child-4, child-4 passes it on to child-7 and so on. After how many minimum such passes (including the first pass from child-1) will the ring come in the hands of child-1 again?

(A) 28 (B) 29  
(C) 30 (D) 32  
(E) Question not attempted

47 If the price of an article is decreased by 25%, and then the new price is increased by 45%, what is the net change (in %) in the price?  
(A) -11.25 (B) -12.5  
(C) 8.75 (D) 20  
(E) Question not attempted

48 If today is Monday, then which day will it exactly be on 7<sup>9</sup>th day?  
(A) Monday (B) Wednesday  
(C) Saturday (D) Tuesday  
(E) Question not attempted

49 How many integers are there between 1 and 100 which have 5 as a digit but are not divisible by 7?  
(A) 17 (B) 14  
(C) 15 (D) 18  
(E) Question not attempted

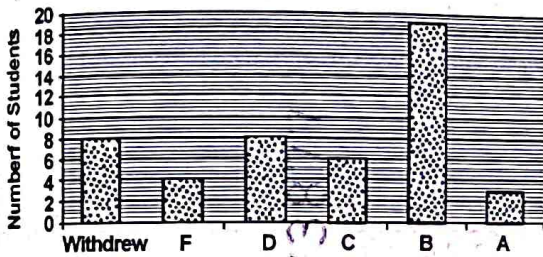
1) The monthly expenditure of a family is represented in a pie chart. The central angle for Food is  $108^\circ$  and for Education is  $54^\circ$ . Consider the following pairs:

1.	Percentage expenditure on Food	30%
2.	Ratio of Food to Education expenditure	2 : 1
3.	Total percentage of remaining sectors	60%

How many of the above pairs are correctly matched?

- (A) Only one pair (B) Only two pairs  
 (C) All three pairs (D) None of the pairs  
 (E) Question not attempted

ii) Consider the following bar graph which represents the grade of the students:



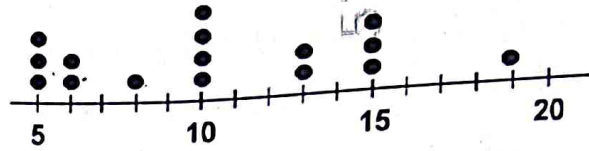
1.	Number of students who withdrew = 8 ✓	Number of students having grade D = 8 ✓	Number of students having grade A = 4 ✓
2.	Number of students who withdrew = 8 ✓	Number of students having grade D = 8 ✓	Number of students having grade A = 3 ✓
3.	Number of students who withdrew = 8 ✓	Number of students having grade C = 8 ✓	Number of students having grade A = 3 ✓

In how many of the above rows is the given information correctly tabulated?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

52 Consider the following information:

Time in Minutes that 16 Customers Waited in Line



1.	Number of customers who waited less than 15 minutes in line is 12 ✓	The largest amount of time in minutes a customer waited in line is 19 ✓	The least amount of time in minutes a customer waited in line is 10 ✓
2.	Number of customers waited less than 15 minutes in line is 12 ✓	The largest amount of time in minutes a customer waited in line is 19 ✓	The least amount of time in minutes a customer waited in line is 5 ✓
3.	Number of customers who waited less than 15 minutes in line is 15 ✓	The largest amount of time in minutes a customer waited in line is 19 ✓	The least amount of time in minutes a customer waited in line is 5 ✓

In how many of the above rows is the given information correctly tabulated?

- (A) Only one  
 (B) Only two  
 (C) All three  
 (D) None  
 (E) Question not attempted

Q. No. 53-54

Island nations of Indian Ocean, rich in biodiversity and natural resources, stand to significantly benefit from geological studies due to their complex history of tectonic activity, mineral wealth, and vulnerability to natural disasters such as tsunamis and earthquakes. With the help of advancing geological research, these island nations can better understand the distribution and sustainability of its minerals like graphite, rare earth elements, and gemstones, while also improving earthquake and tsunami prediction models. This knowledge will not only bolster their economies through responsible mining practices but also enhance public safety and environmental conservation efforts, ensuring a resilient and prosperous future for their people. Geological research can also aid in addressing challenges related to groundwater management, soil erosion, and landslide prevention, thereby supporting sustainable development across the countries' diverse ecosystems.

53 The following inferences have been made from the above passage:

1. Geological research has successfully decoded the entire distribution and sustainability of mineral wealth of the island nations of Indian Ocean.
2. Advancing geological studies can boost sustainable growth by addressing the critical issues related to land and groundwater.
3. Mining is the only industry that supports the economies of these island nations.

4. Environmental conservation efforts can be postponed while the geological research aims to optimize the extraction of minerals.

Which of the above inference/s is/are valid?

- (A) ~~1, 3 and 4~~
- (B) ~~2 and 4~~
- (C) 2 only
- (D) 1 only
- (E) Question not attempted

54 According to the above passage, geological studies do not help the island nations with:

- (A) ~~Managing natural disasters such as earthquake and tsunami.~~
- (B) Improving employment prospects for the people.
- (C) ~~Locating and utilizing minerals and natural resources.~~
- (D) ~~Assisting in monitoring issues such as groundwater management, soil erosion, and landslides.~~
- (E) Question not attempted.

Q. No. 55-56

Modern advances have profoundly influenced sociology by transforming data collection and analysis methodologies, thereby expanding our understanding of social phenomena. With the advent of big data, advanced statistical software, and computational algorithms, sociologists can now analyze vast datasets with unprecedented speed and accuracy, uncovering complex patterns of behaviour and interaction across diverse populations. The proliferation of digital communication platforms has also provided new avenues for studying social dynamics in realtime, enabling researchers to observe and interpret the nuances of virtual communities and networks. Furthermore, the integration of technology in everyday life has reshaped traditional family structures, work environments, and societal norms, prompting sociologists to explore these changes and their implications for human relationships and social institutions. These technological leaps have not only enriched sociological research but have also led to a renaissance in how we conceptualize and address societal challenges in an increasingly interconnected world.

55 Following assumption have been made on the basis of the above passage:

1. The advent of modern advances in data collection and analysis have rendered the sociologists insignificant.
2. Technological integration into day-to-day life has recalibrated traditional family structures, work environments, and societal norms.
3. Rapid and accurate analysis of large datasets has been facilitated using modern technological advancements.

4. Technology has enriched the ability of humans to conceptualize and deal with societal challenges.

Which of the above assumption/s is/are valid?

- (A) 2 only (B) 1, 3 and 4  
 (C) 2, 3 and 4 (D) 2 and 3  
 (E) Question not attempted

56 Following are a few statements made on the basis of the above passage:

1. Our understanding of social phenomena has been enriched by new methods of data collection and analysis.
2. Large datasets can now be analyzed with exceptional speed and accuracy.
3. Expanding digital communication platforms have enabled researchers to observe and interpret the nuances of virtual communities.
4. The sociologists are prompted by technological advancements to abandon the studies related to human relationships and social institutions.

Which of the above statement/s is/are incorrect?

- (A) 4 only  
 (B) 2 and 3  
 (C) 3 only  
 (D) 1, 2 and 3  
 (E) Question not attempted

57 Given below are two statements:

**Statement I :**

In a coding pattern where each letter is increased by 2 and then reversed, "CAT" is coded as "VCE".

**Statement II :**

Using same pattern as in Statement I, "DOG" will be coded as "HQF".

In the light of the above statements, choose the Correct answer from the options given below:

- (A) Both Statement I and Statement II are true.  
 (B) Both Statement I and Statement II are false.  
 (C) Statement I is true but Statement II is false.  
 (D) Statement I is false but Statement II is true.  
 (E) Question not attempted

58 Consider the following statements:

1. If A is taller than B, B is taller than C, then A is taller than C.  
 2. If X is equal to Y, Y is smaller than Z, then X is smaller than Z.  
 3. If P is greater than Q and Q is greater than R, then R is greater than P.

How many of the statements given above are correct?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

59 Consider the following statements:

1.	2, 6, 18	54
2.	3, 9, 27	81
3.	5, 15, 45	135

How many of the statements given above are correct?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

60 Consider the following statements:

1. If all cats are animal, then all animals are cats.  
 2. If all dogs are mammals, then all mammals are dogs.  
 3. If some birds are parrots, then all parrots are birds.

How many of the statements given above are correct?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

61 Consider the following statements :

1. If 5 workers can finish a job in 10 days, then 10 workers can finish it in 6 days.  
 2. If four pencils cost ₹ 20, then 10 pencils cost ₹ 55.  
 3. If two litres of milk cost ₹ 50, then 4 litres cost ₹ 120.

How many of the statements given above are correct?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

Q. No. 62-63

Recent research has profoundly shaped ecological understanding and conservation efforts, transforming once daunting field work into a symphony of high-resolution data and predictive modelling. Satellite imagery, drones, and sensors now provide real-time monitoring of habitats, allowing scientists to track biodiversity trends at unprecedented scales. Genomic technologies reveal the intricate web of species interactions and evolutionary histories, offering insights into ecosystem resilience. Moreover, machine learning algorithms predict ecological responses to climate change, aiding in the proactive management of natural resources. These technological strides enable more effective protection of our planet's biodiversity, fostering a new era of precision conservation that promises to safeguard the intricate tapestry of life on Earth.

62) Consider the following statements based on a close reading of the above passage.

1. Machine learning algorithms have made the prediction of ecological responses to climate change significantly more accurate.
2. Genomic technologies provide information about individual species, not about their interactions or histories.
3. Satellite imagery, drones, and sensors can now facilitate passive management of natural resources.
4. The intricately connected life on Earth stands endangered because of advancements in Genomic technologies.

Which of the above statement/s is/are incorrect?

- (A) 1 only
- (B) ~~2, 3 and 4~~
- (C) 1 and 4 ?
- (D) ~~1, 2 and 3~~
- (E) Question not attempted

63) With reference to the above passage, the following assumptions have been made:

1. Technology has eliminated the need for human intervention in ecological research.
2. Machine learning algorithms have rendered the prediction of ecological responses to climate change foolproof.
3. Genomic technologies have offered fresh observations regarding the factors responsible for making the ecosystem resilient.
4. Recent research in the field of ecology has resulted in a composition of high-resolution data and predictive modelling.

Which of the above assumption/s is /are valid?

- (A) 1 and 2
- (B) 1, 2 and 3
- (C) 2 only
- (D) 3 and 4
- (E) Question not attempted

64 A principal P becomes Q in 1 year when compounded annually with R% annual rate of interest. If the same principal P becomes Q in 1 year when compounded bi-monthly with S% annual rate of interest, then which one of the following is correct?

- (A)  $R \leq S$   
 (B) Insufficient data  
 (C)  $R > S$   
 (D)  $R < S$   
 (E) Question not attempted

65 What is the 207<sup>th</sup> element from right of the sequence: Z, Y, Y, X, X, X, W, W, W, W, V, V, V, V, ..., A?

- (A) H (B) I  
 (C) J (D) M  
 (E) Question not attempted

66 In the series AABABCBCDABCDEF..., which letter appears at the 261<sup>st</sup> place?

- (A) D (B) G  
 (C) H (D) L  
 (E) Question not attempted

67 How many natural numbers are there which give a remainder of 28 when 1458 is divided by the numbers?

- (A) 7 (B) 8  
 (C) 9 (D) 10  
 (E) Question not attempted

68 What is the remainder when  $86 \times 60 \times 12 \times 60 \times 94$  is divided by 100?

- (A) 6 (B) 1  
 (C) 2 (D) 0  
 (E) Question not attempted

69 How many zeroes are there at the end of the following product?

$$5 \times 5 \times 10 \times 15 \times 15 \times 20 \times 35 \times 40 \times 45 \times 55 \times 75 \times 80 \times 85 \times 95 \times 100 \times 100$$

- (A) 18 (B) 14  
 (C) 10 (D) 11  
 (E) Question not attempted

70 Two friends A and B play hide and seek. Initially they are standing at same position. A runs in North for 20 m and B runs in South for 15 m. A then runs in West for 40 m and B runs in East for 10 m. A then runs in North for 15 m and B also runs in North for 50 m. How far apart are the two friends now?

- (A) 0 (B) 35  
 (C) 50 (D) 60  
 (E) Question not attempted

71 Which number amongst  $3^{31}$ ,  $4^{25}$ ,  $5^{21}$ ,  $9^{16}$  is the largest?

- (A)  $3^{31}$  (B)  $4^{25}$   
 (C)  $5^{21}$  (D)  $9^{16}$   
 (E) Question not attempted

@ The Better Senior.

Q. No. 72-73

The right to privacy in the digital age is a critical concept within human rights that has gained prominence with the advent of pervasive digital technologies. This right encompasses the protection of individuals' personal data against unauthorized collection, use, and dissemination by entities such as governments, corporations, and hackers. In landmark declarations like the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights, privacy is recognized as a fundamental right, essential for the protection of human dignity, autonomy, and personal security. As digital footprints expand, ensuring this right requires robust legal frameworks, ethical standards, and technological safeguards to prevent abuses and maintain the balance between security and individual freedoms in an increasingly interconnected world.

72 Which among the following statements made on the basis of the above passage is the most logical?

- (A) Threat posed by digital footprints to individual privacy is insignificant.
- (B) Raising ethical standards is the best safeguard against infringement of individual privacy.
- (C) The corporations use and disseminate the personal data of individual provided by hackers and governments.

(D) Maintaining autonomy, dignity, and personal security in an increasingly digitalized world necessitates multi-pronged measures.

(E) Question not attempted.

73 With reference to the above passage, the following assumptions have been made:

1. Governments worldwide have successfully enforced privacy protection through legal frameworks.
2. Technological safeguards are fully in place to prevent all abuses and to balance security and freedoms of individuals.
3. Digital footprints have multiplied the risk of unethical data handling.
4. Strong legal frameworks are required for maintaining human dignity, autonomy, and personal security.

Which of the above assumptions are invalid?

- (A) 3 and 4
- (B) 1 and 2
- (C) 2 only
- (D) 1 and 4
- (E) Question not attempted

74 Which of the following is/are correct?

1. A and B together can do a piece of work in 12 days. B and C together can do it in 15 days. If A is twice as good a workman as C, then B alone can finish the work in 20 days.
2. If Ram can do a piece of work in 10 days and Shyam can complete the same work in 6 days, then both of them together complete the work within 4 days.

Select the answer using the code given below:

- (A) 1 only                      (B) 2 only  
 (C) Both 1 and 2            (D) Neither 1 nor 2  
 (E) Question not attempted

75 Which of the following statements is/are correct?

1. Pipe X can fill a tank in 30 hr. and pipe Y in 45 hr. If both the pipes are opened to fill an empty tank, then the tank will get filled in 8 hrs.
2. Two pipes P and Q can fill a tank in 15 hr. and 20 hr. respectively while a third pipe R can empty the full tank in 25 hr. All the three pipes are opened together. After 10 hr. R is closed. The tank will be full in next 12 hr.

Select the answer using the code given below:

- (A) 1 only                      (B) 2 only  
 (C) Both 1 and 2            (D) Neither 1 nor 2  
 (E) Question not attempted

76 Which of the following is/are correct?

1. If a sum doubles in 10 years at simple interest, the rate of interest is 10% per annum.
2. If a sum doubles in 10 years at compound interest, the rate of interest must be more than 10% per annum.

Select the answer using the code given below:

- (A) 1 only  
 (B) 2 only  
 (C) Both 1 and 2  
 (D) Neither 1 nor 2  
 (E) Question not attempted

77 Consider the following statements:

1. If A completes a job in 10 days and B in 15 days, then together they will complete it in 6 days.
2. If 6 workers complete a job in 8 days, then 3 workers will complete it in 16 days (same efficiency).
3. If A is twice as efficient as B, then A takes half the time taken by B to complete the same work.

How many of the statements given above are correct?

- (A) Only one  
 (B) Only two  
 (C) All three  
 (D) None  
 (E) Question not attempted

78 Consider the following pairs:

1.	Maternal Uncle	Mother's brother's only sibling
2.	Sister	Father's mother's only son's daughter
3.	Mother	Brother's wife's only mother-in-law

How many of the above pairs are correctly matched?

- (A) Only one pair (B) Only two pairs  
 (C) All three pairs (D) None of the pairs  
 (E) Question not attempted

79 Consider the following pairs:

1.	A number divisible by 2 and 3	Divisible by 6
2.	A number divisible by 4	Divisible by 8
3.	A number divisible by 5 and 10	Divisible by 10

How many of the above pairs are correctly matched?

- (A) Only one pair (B) Only two pairs  
 (C) All three pairs (D) None of the pairs  
 (E) Question not attempted

80 Which of the following is/are correct?

- If a person travels 5 km South and then 12 km East, then his distance from starting point is 13 km.
- If a person is facing North-West and turns 225° clockwise, he will end up facing South.

Select the answer using the codes given below:

- (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2  
 (E) Question not attempted

81 Which of the following is/are correct?

- If P is taller than Q, and Q is shorter than R, then P must be the tallest among the three.
- If X runs faster than Y, and Y runs as fast as Z, then X runs faster than Z.

Select the answer using the codes given below:

- (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2  
 (E) Question not attempted

82 Given below are two statements:

**Statement I :**

A person facing North, after turning 90° clockwise, faces East.

**Statement II :**

After turning 90° anti-clockwise from North, the person faces East.

In the light of the above statements, choose the Correct answer from the options given below:

- (A) Both Statement I and Statement II are true.  
 (B) Both Statement I and Statement II are false.  
 (C) Statement I is true but Statement II is false.  
 (D) Statement I is false but Statement II is true.  
 (E) Question not attempted



ENGLISH VERSION

83 Consider the following statements:

1. The cube of any even number is always even.
2. The square of any odd number is always odd.
3. The product of two odd numbers is always odd.

How many of the statements given above are correct?

- (A) Only one
- (B) Only two
- (C) All three
- (D) None
- (E) Question not attempted

84 Consider the following pairs:

1.	If $A=1, B=2$	then $CAT = 24$ ✓
2.	If $Z=1, Y=2$	then $BAT = 25$
3.	If $A=1, B=2$	then $RAT = 39$ ✓

How many of the above pairs are correctly matched?

- (A) Only one pair
- (B) Only two pairs
- (C) All three pairs
- (D) None of the pairs
- (E) Question not attempted

85 Which of the following statements is/are correct?

1. If all jasmines are flowers and some flowers are white, then some jasmines may be white.
2. If all rats are mammals and all mammals are animal, then all rats are animals.

Select the answer using the codes given below:

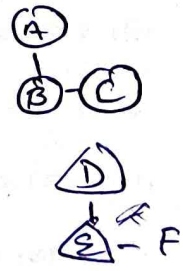
- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2
- (E) Question not attempted

86 Which of the following statements is/are correct?

1. In a family of six members, if A is the father of B, and B is the brother of C, then A is also father of C.
2. If D is mother of E, and E is sister of F, then D may be sister of F.

Select the answer using the codes given below:

- (A) 1 only
- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2
- (E) Question not attempted



[P.T.O.]

87 Consider the following pairs:

1. All roses are flowers : Some flowers are roses
2. Some students are athletes : All athletes are students
3. No cats are dogs : No dogs are cats.

How many of the above pairs are correctly matched?

- (A) Only one pair
- (B) Only two pairs
- (C) All three pairs
- (D) None of the pairs
- (E) Question not attempted

TBS

88 Given below are two statements:

**Statement I :**

The number 1 is a prime number.

**Statement II :**

The number 2 is NOT a prime number.

In the light of the above statements, choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true.
- (B) Both Statement I and Statement II are false.
- (C) Statement I is true but Statement II is false.
- (D) Statement I is false but Statement II is true.
- (E) Question not attempted

89 Given below are two statements:

**Statement I :**

The sum of a rational and an irrational number is always rational.

**Statement II :**

$\sqrt[3]{2}$  is rational.

In the light of the above statements, choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true.
- (B) Both Statement I and Statement II are false.
- (C) Statement I is true but Statement II is false.
- (D) Statement I is false but Statement II is true.
- (E) Question not attempted

90 Consider the following pairs:

	List - I	List - II
1.	LCM of numbers	Product of greatest powers of prime factors
2.	$\text{HCF}(a, b) \times \text{LCM}(a, b)$	Equal to $a + b$
3.	Composite number	Exactly two factors

How many of the above pairs are correctly matched?

- (A) Only one pair
- (B) Only two pairs
- (C) All three pairs
- (D) None of the pairs
- (E) Question not attempted

ENGLISH VERSION

91 The average age of 2 teachers and 6 students is 14 years. All the 6 students are of same age and the 2 teachers are also of same age. The difference between the age of a teacher and a student is 24 years, then what is the age of a teacher?

- (A) 34 years (B) 36 years  
(C) 32 years (D) 33 years  
(E) Question not attempted

92 The average score of a batsman after his 90<sup>th</sup> innings was 79.2. After 120<sup>th</sup> innings, his average score increased by 7.8. What is his average score in the last 30 innings?

- (A) 137.7 (B) 65.1  
(C) 110.4 (D) 157.1  
(E) Question not attempted

93 A has some coins. A gives  $\frac{1}{4}$  of the total coins and 3 coins more to B. B gives  $\frac{1}{4}$  of the total coins he receives and 5 coins more to C. Further, C gives  $\frac{1}{3}$  of the coins he receives and 1 coin more to D. The number of coins D has now is 20. How many coins did A have in the beginning?

- (A) 683 (B) 799  
(C) 820 (D) 1100  
(E) Question not attempted

94 In the equation,  $H3 - H2 + 81 - 62 - 44 - H9 = -103$  which digit does the symbol H stand for?

- (A) 4 (B) 7  
(C) 9 (D) 5  
(E) Question not attempted

95 Consider the following statements:

- The sum of any two sides of a triangle is always greater than the third side.
- A rectangle is a special type of square in which all sides are equal.
- The area of a circle with radius 'r' is  $2\pi r$ .

How many of the statements given above are correct?

- (A) Only one (B) Only two  
(C) All three (D) None  
(E) Question not attempted

96 Consider the following statements:

- Pointing to a man, a woman says : "His mother is the only daughter of my mother". The woman is the man's mother.
- Pointing to a photograph, a man says : "I have no brother or sister, but this person's father is my father's son". The person in the photograph is the speaker's son.
- Your father's wife's only sibling's mother is your paternal grandmother.

How many of the statements given above are correct?

- (A) Only one (B) Only two  
(C) All three (D) None  
(E) Question not attempted

Given below are two statements:

**Statement I :**

Four year ago, the ratio of ages of Neeru and Divya was 3:4, average of the present age of Neeru, Divya and Kusum is 26 years. Also, Kusum is 11 years younger than Divya. The present age of Divya is 38 years.

**Statement II :**

The age of mother today is thrice that of her daughter. After 10 years, the age of the mother will be twice that of her daughter. The present age of the daughter is 30 years.

In the light of the above statements, choose the correct answer from the options given below:

- (A) Both Statement I and Statement II are true.  
 (B) Both Statement I and Statement II are false.  
 (C) Statement I is true but Statement II is false.  
 (D) Statement I is false but Statement II is true.  
 (E) Question not attempted

98 Consider the following statements:

1. If 48% of a number is 120, then 170% of the number will be 350.  
 2. The number 3.5 can be expressed in terms of percentage as 350%.  
 3. 1100 boys and 700 girls appeared in a test, 42% of the boys and 30% of the girls passed. The percentage of total who failed is  $62\frac{2}{3}\%$

How many of the statements given above are correct?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

99 Consider the following statements:

1. Shipra purchased a car for ₹ 3,50,000 and sold it for ₹ 4,48,000. Her gain is 28%.  
 2. A vendor bought oranges at rate of 6 oranges for ₹ 10 and sold them at rate of 4 oranges for ₹ 6. The percent loss the vendor incurred on the oranges is 20%.  
 3. After successive discount of 12% and 5%, an article was sold for ₹ 418. The original price of the article was ₹ 250.

How many of the statements given above are correct?

- (A) Only one (B) Only two  
 (C) All three (D) None  
 (E) Question not attempted

100 Which of the following statements is/are correct?

1. A man's speed with the current is 15 km/hr and the speed of the current is 2.5 km/hr. The man's speed against the current will be 10 km/hr.  
 2. The speed of a boat in still water is 22 km/hr. and the rate of current flow is 3 km/hr. The distance travelled in downstream direction in 12 minutes will be 5 km.

Select the answer using the code given below:

- (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2  
 (E) Question not attempted